

## MOBILITY MISSION REPORT

*This work has been partially supported by the EURAD project that has received funding from H2020-EURATOM 1.2 under grant agreement ID 847593.*

*The information included in this mission report consists of personal data of applicants, and in the frame of GDPR we ask you place emphasis on its integrity: the personal data in this mission report cannot be used for purposes other than the evaluation and the management of EURAD Mobility Programme. For the avoidance of doubt, this information – out of its nature – is confidential information as mentioned in Article 10.1 of the EURAD Consortium Agreement Version [17/09/2019] with effective date of 1 June 2019 (although it might not be explicitly marked as such).*

### **REPORT TEMPLATE GUIDELINES — REMOVE THIS ENTIRE SECTION BEFORE SUBMITTING**

- *This template consists of “sections” (fixed headings) and “fields” (text boxes for custom information)*
- *All sections and fields are mandatory unless specified otherwise*
- *Appendix “A. Mission journal” should be prepared during the course of the mission*
- *All template guidelines shall be replaced with custom text or removed as specified*
- *The report shall be approved by the official mission mentors or supervisors before submission (use the signature block at the very end of the report template)*
- *The report shall be submitted in both editable (.doc) and portable (.pdf) file formats*
- *Both files shall use the code of the mission as the filename’s suffix, i.e. “Mission\_Report\_SXXXXX”: the word “Template” shall be replaced with the initial code assigned automatically to the application (letter “S” followed by 5 digits)*
- *The report shall be submitted via email to [euradwp13@sckcen.be](mailto:euradwp13@sckcen.be)*

## MISSION TITLE

Attendace at the Géotechnique 75th Anniversary Event

## DESCRIPTION

### Concerned organisations

- Research entities
- Technical support organisations
- Waste management organisations

## Concerned infrastructures or facilities

Klikněte nebo klepněte sem a zadejte text.

## Concerned phases

- Phase 5: Post-closure

## Themes and topics

- Theme 4: Geoscience to understand rock properties, radionuclide transport and long-term geological evolution
  - Long-term stability (uplift, erosion and tectonics)
  - Perturbations (gas, temperature and chemistry)
  - Aqueous pathways and radionuclide migration

## Keywords

Host rock; gas transport; microstructural changes; permeability.

## EXECUTIVE SUMMARY

The paper 'A multi-scale insight into gas transport in a deep Cenozoic clay' by L. Gonzalez-Blanco and E. Romero was published in *Géotechnique* in 2022. It was awarded with the "75th *Géotechnique* Anniversary Early Career Award (insightful paper on Soil micromechanics published in the decade 2013-2023)". Since *Géotechnique* is one of the world's premier geotechnics journals, publishing research of the highest quality on all aspects of geotechnical engineering, this recognition has a relevant impact and allows a larger diffusion of the research carried out within EURAD WP GAS.

## 1. MISSION BACKGROUND

Klikněte nebo klepněte sem a zadejte text.

### 1.1. R&D background

The proposed mobility action implies the travel from Barcelona (Spain) to London (United Kingdom), the accommodation, and the daily allowance to participate in the “Géotechnique 75th Anniversary Event” that will take place on the 27th of October 2023. Géotechnique is one of the world's premier geotechnics journals, publishing research of the highest quality on all aspects of geotechnical engineering. To celebrate its 75th anniversary the journal selected the best papers of early-career scientists published within the last decade on three topics. My paper ‘A multi-scale insight into gas transport in a deep Cenozoic clay’ was awarded with the “75th Géotechnique Anniversary Early Career Award (insightful paper on Soil micromechanics published in the decade 2013-2023)”.

### 1.2. Mission objectives

During the event, a poster containing relevant information about the paper will be presented, which will allow to spread EURAD results within the geotechnical community

### 1.3. Mission request

The results presented and the collection of the prize allowed greater visibility to the research developed within EURAD.

### 1.4. Mission composition

#### Host organisation

The Institution of Civil Engineers, London (UK)

#### Host facility

Not applicable

#### Mission dates

Not applicable

## 2. MAJOR PRACTICES, TECHNIQUES, METHODS, TOOLS OR SYSTEMS OPERATED OR STUDIED

*Describe up to four of the most important practices, methods or tools you operated or*

### 2.1. Practice, technique, method, tool or system operated or studied during the mission

Replace this entire field with the name of the practice, technique, method, tool or system that is the object of this mission.

#### Description

Not applicable

#### Usage

Not applicable

#### Benefits

Not applicable

#### Limitations

Not applicable

#### Applicability

Not applicable

### 2.2. Practice, technique, method, tool or system operated or studied during the mission

Not applicable

#### Description

Not applicable

#### Usage

Not applicable

#### Benefits

Not applicable

### Limitations

Not applicable

### Applicability

Not applicable

#### 2.3. Practice, technique, method, tool or system operated or studied during the mission

Not applicable

### Description

Not applicable

### Usage

Not applicable

### Benefits

Not applicable

### Limitations

Not applicable

### Applicability

Not applicable

#### 2.4. Practice, technique, method, tool or system operated or studied during the mission

Not applicable.

### Description

Not applicable.

### Usage

Not applicable.

### Benefits

Not applicable.

### **Limitations**

Not applicable.

### **Applicability**

Not applicable.

### 3. MISSION FINDINGS AND CONCLUSIONS

*This entire section shall be maximum one page (remove this entire sentence).*

#### 3.1. Lessons learned and conclusions

Not applicable.

#### 3.2. Relevant findings and conclusions for home organisation

Not applicable.

#### 3.3. Relevant findings and conclusions for host organisation

Not applicable.

#### 3.4. Relevant findings and conclusions for other organisations

Not applicable.

## 4. POTENTIALS FOR IMPROVEMENT OR DEVELOPMENT

*This entire section shall be maximum one page (remove this entire sentence).*

### 4.1. Generic potentials

Not applicable.

### 4.2. Potentials for home organisation

Not applicable.

### 4.3. Potentials for host organisation

Not applicable.



## APPENDICES

### Mission journal

Thursday 26<sup>th</sup> September 2023 – Travel from Barcelona (Spain) to London (UK).

Friday 27<sup>th</sup> September 2023 – Attendance at the 75<sup>th</sup> Anniversary of Géotechnique

Saturday 28<sup>th</sup> September 2023 – Return to Barcelona (Spain)

### Mission bibliography

Gonzalez-Blanco, L. & Romero, E. (2022) A multi-scale insight into gas transport in a deep Cenozoic clay. *Géotechnique*, Ahead of print.

## MISSION BENEFICIARY

Laura GONZALEZ-BLANCO  
 Post-doctoral researcher  
 Geomechanics Group  
 International Center for Numerical Methods in Engineering (CIMNE), Spain

## PARTNER EXPERTS CONTRIBUTING TO THE MISSION

### Host organisation experts

- Not applicable

### Home organisation experts

- Not applicable

### Other organisations experts

- Not applicable

## REPORT APPROVAL

Date	Beneficiary	Home mentor/supervisor	Host mentor/supervisor
Date of last signee	Laura Gonzalez-Blanco	Enrique Romero	Not applicable
	Visa	Visa	Visa